

What is claimed is:

1. An optical disc device comprising:  
a pickup having a semiconductor laser for providing a laser beam for recording of data on an optical disc;  
a motor coupled to rotate the optical disc;  
a movement mechanism configured to move the pickup in a radial direction of the optical disc;  
a system controller configured to control the pickup by supplying drive current to the semiconductor laser and to control rotational speed of the optical disc; and  
a temperature sensor configured to detect temperature of an interior of the optical disc device;  
wherein the system controller determines data recording properties of the optical disc and controls the drive current in accordance with the temperature detected by the temperature sensor and controls the rotational speed of the optical disc based on the detected temperature.
2. The optical disc device according to claim 1, wherein the system controller determines the data recording properties of the optical disc based on information recorded in an inner circumferential section of the optical disc.
3. The optical disc device according to claim 1, wherein the system controller comprises a table for setting the data recording speed onto the optical disc, the table containing the detected temperature and the data recording properties of the disc as parameters.
4. The optical disc device according to claim 1, wherein the dimension of the optical disc device in the thickness direction thereof is no more than 10 mm.
5. The optical disc device according to claim 1, wherein the data recording properties of the optical disc include at least one of the type of the optical disc, information regarding the manufacturer of the optical disc, information regarding the laser power needed for recording, and information regarding the rotational speed of the optical disc.

6. A method of data recording of an optical disc device comprising:  
rotating an optical disc;  
recording data by directing a laser beam onto the optical disc;  
detecting temperature of an interior region of the optical disc device;  
controlling drive current to the semiconductor laser based on the detected temperature;  
determining data recording properties of the optical disc; and  
setting the rotational speed of the optical disc based on the detected temperature and the data recording properties of the optical disc.

7. The method of data recording of an optical disc device according to claim 6, wherein the data recording properties of the optical disc are determined based on information recorded in an inner circumferential section of the optical disc.

8. The method of data recording of an optical disc device according to claim 6, wherein setting of the rotational speed of the optical disc is performed prior to recording data onto the optical disc.

9. The method of data recording of an optical disc device according to claim 6, wherein setting of the rotational speed of the optical disc is performed after recording data onto the optical disc.

10. The method of data recording of an optical disc device according to claim 6, wherein the data recording properties of the optical disc include at least one of the type of the optical disc, information regarding the manufacturer of the optical disc, information regarding the laser power needed for recording, and information regarding the rotational speed of the optical disc.